

Application No.: 09/745,108
Amendment Dated: May 29, 2004
Reply to Office Action of: July 5, 2001

In the Claims:

The current claim set of the application is presented below. Indications as to the status of the claims ("original", "currently amended", "cancelled", "new", etc.) appear in parentheses after the claim number. Deletions are identified in bold with double brackets and strikethrough (e.g. ~~[[deletion]]~~) and new text is identified in bold with underlining (e.g. new language).

Please cancel claims 1-9 and add new claims 10-39.

1. (Canceled)
2. (Canceled)
3. (Canceled)
4. (Previously Canceled)
5. ((Previously Canceled)
6. (Previously Canceled)
7. (Previously Canceled)
8. (Previously Canceled)
9. (Previously Canceled)

10. (New) A locator tool for determining the orientation of a medical device with an implanted adjustable valve, the medical device having a tactile physical characteristic that indicates a specific orientation of the implanted adjustable valve of the medical device, the tactile physical characteristic having an outer edge, the locator tool comprising:

an indicator of an orientation of the medical device; and

means for coupling the indicator of an orientation of the medical device with the physical characteristic of the medical device to indicate a specific orientation of the medical device, the means including a deck having an outer edge and a locator central opening extending entirely through the deck, the locator central opening having an outer edge defining the locator central opening, the outer edge of the locator central opening corresponding in shape

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to the outer edge of the tactile physical characteristic, wherein the locator central opening is capable of overlaying the conforming to the tactile physical characteristic so that the space between the locator central opening and the tactile physical characteristic is minimized to indicate alignment between the locator central opening and the tactile physical characteristic.

11. (New) An indicator tool for indicating the current setting of an implanted adjustable valve with a tactile physical characteristic that indicates a specific orientation of the valve and a magnet indicating a current setting of the valve, the indicator tool interacting with a locator tool having an indicator of an orientation of the valve and means for coupling the indicator of an orientation of the valve with the tactile physical characteristic of the valve to indicate a specific orientation of the valve, the means including a deck having an outer edge and a locator central opening extending entirely through the deck, the locator central opening having an outer edge defining the locator central opening, the outer edge of the locator central opening corresponding in shape to the outer edge of the tactile physical characteristic, wherein the locator central opening is capable of overlaying and conforming to the tactile physical characteristic so that the space between the locator central opening and the tactile physical characteristic is minimized to indicate alignment between the locator central opening and the tactile physical characteristic, the indicator tool comprising:

means for magnetically coupling with the magnet in a valve to indicate a current setting of the valve;

means for indicating the current setting of the valve; and

means for physically and removably coupling the indicator tool to the locator tool so that the indicator tool is aligned with the locator tool.

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12. (New) An adjustment tool for changing the current setting of an implanted adjustable valve with a tactile physical characteristic that indicates a specific orientation of the valve and a magnet capable of changing a current setting of the valve by physical movement of the magnet, the adjustment tool interacting with a locator tool having an indicator of an orientation of the valve and means for coupling the indicator of an orientation of the valve with the tactile physical characteristic of the valve to indicate a specific orientation of the valve, the means including a deck having an outer edge and a locator central opening extending entirely through the deck, the locator central opening having an outer edge defining the locator central opening, the outer edge of the locator central opening corresponding in shape to the outer edge of the tactile physical characteristic, wherein the locator central opening is capable of overlaying and conforming to the tactile physical characteristic so that the space between the locator central opening and the tactile physical characteristic is minimized to indicate alignment between the locator central opening and the tactile physical characteristic, the adjustment tool comprising:

means for magnetically coupling with the magnet in the valve to move the magnet to change the current setting of the valve;

means for moving the magnet in the valve to move the magnet to change the current setting of the valve; and

means for coupling the means for moving the magnet to the locator tool so that the locator tool constrains the movement of the means for moving the magnet relative to the valve.

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13. (New) A system for indicating the current setting of an implanted adjustable valve with a tactile physical characteristic that indicates a specific orientation of the valve and a magnet indicating a current setting of the valve, the tactile physical characteristic having an outer edge, the system comprising:

a locator tool comprising:

an indicator of an orientation of the valve; and

means for coupling the indicator of an orientation of the valve with the tactile physical characteristic of the valve to indicate a specific orientation of the valve, the means including a deck having an outer edge and a locator central opening extending entirely through the deck, the locator central opening having an outer edge defining the locator central opening, the outer edge of the locator central opening corresponding in shape to the outer edge of the tactile physical characteristic, wherein the locator central opening is capable of overlaying and conforming to the tactile physical characteristic so that the space between the locator central opening and the tactile physical characteristic is minimized to indicate alignment between the locator central opening and the tactile physical characteristic;

an indicator tool comprising:

means for magnetically coupling with the magnet in a valve to indicate a current setting of the valve; and

means for indicating the current setting of the valve.

14. (New) A system for changing the current setting of an implanted adjustable valve with a tactile physical characteristic that indicates a specific orientation of the valve and a magnet

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capable of changing a current setting of the valve by physical movement of the magnet, the tactile physical characteristic having an outer edge, the system comprising:

a locator tool comprising:

an indicator of an orientation of the valve; and

means for coupling the indicator of an orientation of the valve with the tactile physical characteristic of the valve to indicate a specific orientation of the valve, the means including a deck having an outer edge and a locator central opening extending entirely through the deck, the locator central opening having an outer edge defining the locator central opening, the outer edge of the locator central opening corresponding in shape to the outer edge of the tactile physical characteristic, wherein the locator central opening is capable of overlaying and conforming to the tactile physical characteristic so that the space between the locator central opening and the tactile physical characteristic is minimized to indicate alignment between the locator central opening and the tactile physical characteristic;

an adjustment tool comprising:

means for magnetically coupling with the magnet in the valve to move the magnet to change the current setting of the valve;

means for moving the magnet in the valve to move the magnet to change the current setting of the valve.

15. (New) A system for determining and changing the current setting of an implanted adjustable valve with a tactile physical characteristic that indicates a specific orientation of the

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valve and a magnet capable of changing a current setting of the valve by physical movement of the magnet, the tactile physical characteristic having an outer edge, the system comprising:

a locator tool comprising:

an indicator of an orientation of the valve; and

means for coupling the indicator of an orientation of the valve with the tactile physical characteristic of the valve to indicate a specific orientation of the valve, the means including a deck having an outer edge and a locator central opening extending entirely through the deck, the locator central opening having an outer edge defining the locator central opening, the outer edge of the locator central opening corresponding in shape to the outer edge of the tactile physical characteristic, wherein the locator central opening is capable of overlaying and conforming to the tactile physical characteristic so that the space between the locator central opening and the tactile physical characteristic is minimized to indicate alignment between the locator central opening and the tactile physical characteristic;

an indicator tool comprising:

means for magnetically coupling with the magnet in a valve to indicate a current setting of the valve; and

means for indicating the current setting of the valve

an adjustment tool comprising:

means for magnetically coupling with the magnet in the valve to move the magnet to change the current setting of the valve;

means for moving the magnet in the valve to move the magnet to change the current setting of the valve.

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16. (New) A method of orienting a medical device with an implanted adjustable valve with a tactile physical characteristic that indicates a specific orientation of the valve, the method comprising the steps of:

providing a locator tool having an indicator of desired orientation of a valve and having means for coupling with the tactile physical characteristic of the valve that indicates a specific orientation of the valve, the means including a deck having an outer edge and a locator central opening extending entirely through the deck, the locator central opening having an outer edge defining the locator central opening, the outer edge of the locator central opening corresponding in shape to the outer edge of the tactile physical characteristic, wherein the locator central opening is capable of overlaying and conforming to the tactile physical characteristic so that the space between the locator central opening and the tactile physical characteristic is minimized to indicate alignment between the locator central opening and the tactile physical characteristic;

palpating the valve to determine its physical characteristics;

setting the locator tool over a portion of the valve so that the locator tool is mechanically coupled to the tactile physical characteristic of the valve that indicates a specific orientation of the valve by placing the locator central opening over the tactile physical characteristic so that the space between the locator central opening and the tactile physical characteristic is minimized.

17. (New) A method of indicating the current setting of an implanted adjustable valve with a tactile physical characteristic that indicates a specific orientation of the valve and a magnet indicating a current setting of the valve, the method comprising the steps of:

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providing a locator tool having an indicator of desired orientation of a valve and having means for coupling with the physical characteristic of the valve that indicates a specific orientation of the valve;

providing a locator tool having an indicator of desired orientation of a valve and having means for coupling with the tactile physical characteristic of the valve that indicates a specific orientation of the valve, the means including a deck having an outer edge and a locator central opening extending entirely through the deck, the locator central opening having an outer edge defining the locator central opening, the outer edge of the locator central opening corresponding in shape to the outer edge of the tactile physical characteristic, wherein the locator central opening is capable of overlaying and conforming to the tactile physical characteristic so that the space between the locator central opening and the tactile physical characteristic is minimized to indicate alignment between the locator central opening and the tactile physical characteristic;

palpating the valve to determine its physical characteristics;

setting the locator tool over a portion of the valve so that the locator tool is mechanically coupled to the physical characteristic of the valve that indicates a specific orientation of the valve by placing the locator central opening over the tactile physical characteristic so that the space between the locator central opening and the tactile physical characteristic is minimized;

coupling the indicator tool to the locator tool to align the indicator tool with the locator tool;

wherein, the current setting of the valve is indicated by the indicator tool.

18. (New) A method of changing the current setting of an implanted adjustable valve with a tactile physical characteristic that indicates a specific orientation of the valve and a magnet

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capable of changing a current setting of the valve by physical movement of the magnet, the method comprising the steps of:

providing a locator tool having an indicator of desired orientation of a valve and having means for coupling with the tactile physical characteristic of the valve that indicates a specific orientation of the valve, the means including a deck having an outer edge and a locator central opening extending entirely through the deck, the locator central opening having an outer edge defining the locator central opening, the outer edge of the locator central opening corresponding in shape to the outer edge of the tactile physical characteristic, wherein the locator central opening is capable of overlaying and conforming to the tactile physical characteristic so that the space between the locator central opening and the tactile physical characteristic is minimized to indicate alignment between the locator central opening and the tactile physical characteristic;

providing an adjustment tool having means for magnetically coupling with the magnet in the valve to move the magnet to change the current setting of the valve;

palpating the valve to determine its physical characteristics;

setting the locator tool over a portion of the valve so that the locator tool is mechanically coupled to the physical characteristic of the valve that indicates a specific orientation of the valve by placing the locator central opening over the tactile physical characteristic so that the space between the locator central opening and the tactile physical characteristic is minimized;

coupling the adjustment tool to the locator tool to align the adjustment tool with the locator tool;

moving the magnet to change the current setting of the valve.

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19. (New) The locator tool of claim 10 wherein the indicator of an orientation of the medical device is a visual indicator to the orientation of the medical device.
20. (New) The locator tool of claim 19 wherein the visual indicator is an arrow.
21. (New) The locator tool of claim 19 wherein the indicator of an orientation of the medical device is located on the deck.
22. (New) The locator tool of claim 10 wherein the means for coupling further includes a substantially cylindrical tube having an inner surface, the outer edge of the deck being attached to the inner surface of the tube.
23. (New) The locator tool of claim 10 wherein the deck is substantially planar.
24. (New) The adjustment tool of claim 12 wherein the means for coupling the means for moving the magnet to the locator tool so that the locator tool constrains the movement of the means for moving the magnet includes means for removably constraining the movement of the means for moving the magnet.
25. (New) The locator tool of claim 13 wherein the indicator of an orientation of the medical device is a visual indicator to the orientation of the medical device.
26. (New) The locator tool of claim 25 wherein the visual indicator is an arrow.

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27. (New) The locator tool of claim 25 wherein the indicator of an orientation of the medical device is located on the deck.
28. (New) The locator tool of claim 13 wherein the means for coupling further includes a substantially cylindrical tube having an inner surface, the outer edge of the deck being attached to the inner surface of the tube.
29. (New) The locator tool of claim 13 wherein the deck is substantially planar.
30. (New) The locator tool of claim 14 wherein the indicator of an orientation of the medical device is a visual indicator to the orientation of the medical device.
31. (New) The locator tool of claim 30 wherein the visual indicator is an arrow.
32. (New) The locator tool of claim 30 wherein the indicator of an orientation of the medical device is located on the deck.
33. (New) The locator tool of claim 14 wherein the means for coupling further includes a substantially cylindrical tube having an inner surface, the outer edge of the deck being attached to the inner surface of the tube.
34. (New) The locator tool of claim 14 wherein the deck is substantially planar.

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35. (New) The locator tool of claim 15 wherein the indicator of an orientation of the medical device is a visual indicator to the orientation of the medical device.

36. (New) The locator tool of claim 35 wherein the visual indicator is an arrow.

37. (New) The locator tool of claim 35 wherein the indicator of an orientation of the medical device is located on the deck.

38. (New) The locator tool of claim 15 wherein the means for coupling further includes a substantially cylindrical tube having an inner surface, the outer edge of the deck being attached to the inner surface of the tube.

39. (New) The locator tool of claim 15 wherein the deck is substantially planar.